#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024639 Address: 333 Burma Road **Date Inspected:** 12-Feb-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 1500 **Project Name:** SAS Superstructure **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Changxing Island **Location:** Shanghai, China

**CWI Name:** Sha Zhi **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Vikram Singh was present during the times noted above for observations relative to the work being performed at ZPMC.

**WELDING** 

OBG Bay 14

This QA Inspector randomly observed the following work in progress:

Submerged Arc Welding (SAW)

This QA Inspector observed the welding operation per the SAW process on a weld joint identified as SEG3009-001 located on Deck Panel of the OBG Segment 13BE. The welder is identified as 215993. ZPMC Quality Control (QC) is identified as Mr. Zhong Yong Gang. The welding variables recorded by QC appeared to comply with WPS-B-T-2221-B-L2C-S-2.

Shielded Metal Arc Welding (SMAW)

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3019BB-169 located on Vertical Shear plate to Bottom panel of the OBG Segment 14E. The welder is identified as 044772. ZPMC Quality Control (QC) is identified as Mr. Li Yan Hua. The welding variables

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recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and B-CWR2737.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as DP3162-001-023 located on Deck Panel of the OBG Segment 14E. The welder is identified as 067904. ZPMC Quality Control (QC) is identified as Mr. Xieming Feng. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3019BB-059 located on SA to Bottom Plate of the OBG Segment 14E. The welder is identified as 215553. ZPMC Quality Control (QC) is identified as Mr. Xieming Feng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair and B-CWR2737.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3019L-1-001 located on Floor Beam to Bottom Plate of the OBG Segment 14E. The welder is identified as 037723. ZPMC Quality Control (QC) is identified as Mr. Xieming Feng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair and B-CWR2668.

Flux Cored Arc Welding (FCAW)

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3011A-001 located on Side Plate to Corner Assembly of the OBG Segment 13CE. The welder is identified as 066041. ZPMC Quality Control (QC) is identified as Mr. Zhong Yong Hong. The welding variables recorded by QC appeared to comply with WPS-B-T-2231-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3009D-001 located on Deck panel diaphragm to Deck panel diaphragm of the OBG Segment 13BE. The welder is identified as 052696. ZPMC Quality Control (QC) is identified as Mr. Zhong Yong Hong. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3009G-001 located on Deck panel diaphragm to Deck panel diaphragm of the OBG Segment 13BE. The welder is identified as 067138. ZPMC Quality Control (QC) is identified as Mr. Zhong Yong Hong. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3011K-005 located on Deck panel diaphragm to Corner Assembly of the OBG Segment 13CE. The welder is identified as 066881. ZPMC Quality Control (QC) is identified as Mr. Zhong Yong Gang. The welding variables recorded by QC appeared to comply with WPS-B-T-2133-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3019L-072 located on Anchorage Plate to Floor Beam of the OBG Segment 14E. The welder is identified as 067520. ZPMC Quality Control (QC) is identified as Mr. Xieming Feng. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

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This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3019BB located on Anchor Plate to Vertical Shear Plate of the OBG Segment 14E. The welder is identified as 066763. ZPMC Quality Control (QC) is identified as Mr. Xieming Feng. The welding variables recorded by QC appeared to comply with WPS-B-T-2133-ESAB.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

## **Summary of Conversations:**

No relevant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Singh,Vikram	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer